

ABSTRACT OF THE DISCLOSURE

A method and apparatus is provided for performing a redundancy programming. The system of the present invention includes a device testing unit for performing a memory test. The system also includes a memory device operatively coupled to the device testing unit.

5 The memory device includes an access transistor that includes a charge trapping area. A threshold voltage of the access transistor is modified upon trapping of charges in the charge trapping unit. The memory device also includes a memory element and a fuse associated with the memory element. The fuse is capable of entering an alternative state in response to modifying the threshold voltage of the access transistor. The state of the fuse may be used to

10 program or de-program the memory element.